3378

December 19, 2018 edited

4-29-18 Test 15

p 559 https://youtu.be/fRFWx9OxSgk **3378 Test 15**

Not too cold, not too hot, but just right. #13 was 68 degrees, #14 was 84 degrees, this was 76 degrees F. I kept the time the same as the first one, #13, one hour, just to see what a higher temperature and more agitation would look like. It worked. I always wanted a higher contrast image on low contrast gray days, now this is it.

Bolex H16RX4 with the 10mm Switar RX lens

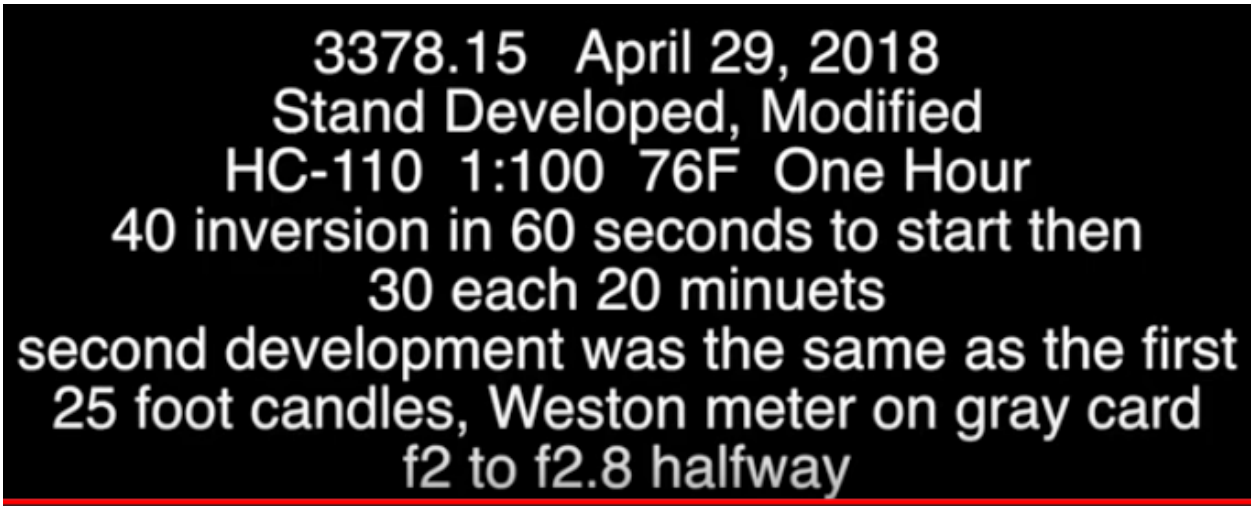
Exposure: Overcast. Lights are on by the door in the middle garage. 9 am Light was 25 with the Weston off a gray card on the back of the chair. The Asa used was 12 and the exposure was f2 - f2.8 in the middle.

Development: HC-110 1:100 76 degrees Fahrenheit one hour Lots of agitation Dry 40x in 60 sec then at each 20 minuets 30x in 40 sec.

The film was cooled and warmed gradually during washing, bleaching, and clearing. Re Exposure was the same 30 seconds per side plus 4 x 90 degree flips. However, a blue daylight bulb was used instead of orange incandescent.

The second development was the same as the first. HC-110 1:100 76 degrees one hour 40x and then 30x each 20 minuets.

Results: Perfect! The second development was done Stand to lessen blacks and increase mid tones and light details. D-95 would not look the same as this.



Now to try it on a bright sunny day.

4-30-18 Test 16, to May 2

p 562, 563, 564 https://youtu.be/jSqZ-7J7OAE **3378 Test 16**

Bright sunlight on skin was done with the developing scheme made to be half way between that of Test 12 and Test 15 films.

Bolex H16Rx4 with a newly fixed lens

Exposure: Light was 200+1 block on the Weston meter off a gray card or 300-. The setting was 12 Asa which gave f 8.

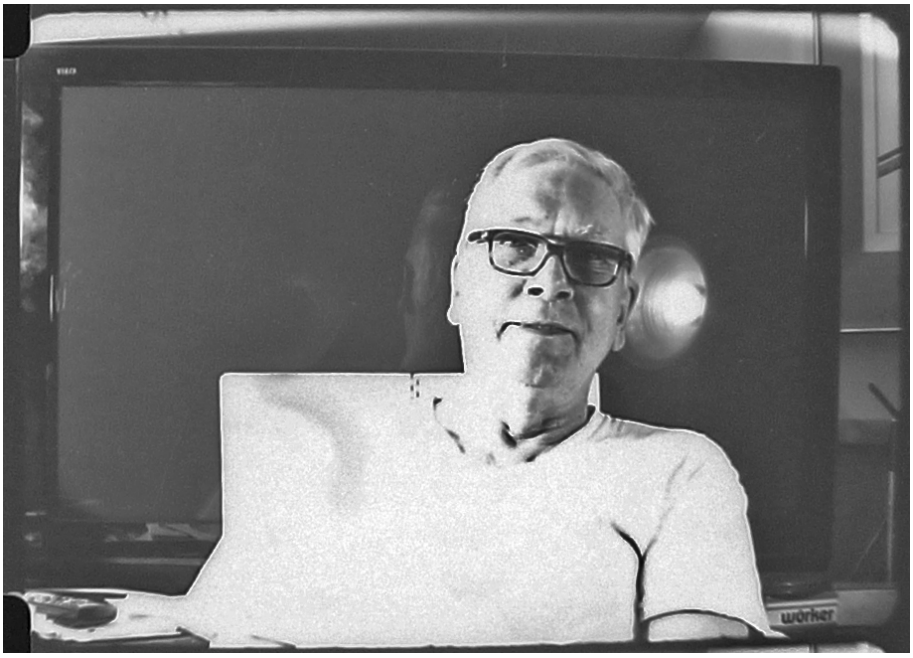
Development: was in HC-110 for 1 1/4 hours at 73 degrees Fahrenheit diluted 1:100. No pre soaking. Agitation was carefully adjusted to be at the start 15x then at each 20 minuets 10x. The first developer was dumped out. The second developer was HC-110 1:100 one hour at 73 degrees 15x to start and 10x at 20 minuets and at 40 minuets

Results: No need to tone this. Hair shows. Skin is smooth. Take this to the bank.

Note that the hair can now be seen clearly.

NEGATIVES

3378 may be developed as negative. It would then have to be scanned or printed onto film, contact printed, to be able to see it as a positive.

	Very harsh.
	Focused on a stand in at 7 feet. Looks real sharp to me. Adjustments were made in Photoshop Elements This was developed the next day as a negative using Dektol 1:3 at 20C 2.5 minuets

	Overexposed by at least half a stop. Light was between 25 and 13 on the line to a gray card with the Weston. I exposed at between f2 and f1.4 halfway. F2 would have been better.
	Dektol 1:3 20C. 2.5 minuets I wanted to see if Dektol would make continuous tone images. It does but only at a perfect exposure. Perhaps more dilute developer or less time. I agitated 10X then 3X

Page 671 Left page. Will 3378 make a negative? I got data.

The Negative is missing. I have to find it. It's around somewhere. These negatives are dated May 12, whereas the focus test ones are May 11. So, that means there were two different shoots indoors.

Exposure: The closeup was shot on the back porch at 4:30 PM. Overcast Light was read off a gray card held on the knoll post with the Weston light meter. 25 / 13 on the line at 12 ASA. Exposure was halfway between f1.4 and f2. Three windings were made followed by one more to clear the gate. The Som Berthiot 25mm RX lens VA2273, which was columnated, was used on the Bolex RX4 camera, at 1/55 second. Focus was at 1 3/4 feet hand held with a bent arm. No shade was on the lens.

The medium shot in the studio has no lighting notes on p. 572. Focus was set to 7 feet at my face.

Development: Dektol 1:3, 68 degrees F, 2.5 minuets. This recipe resulted from a Web search. I mixed Dektol but didn't have enough Sodium Carbonate for a 1L batch. One half a Litre was mixed instead. The remainder was saved until I got more. 40ml stock solution was put into 120ml of water. Fix was 5 minuets.

Results: Focus is great! Dektol worked, harshly. I over exposed. Weston 25/13 is f2 @ 12 ASA with 1/55 and that would have been better. Underexposure is better than overexposure in this case. The studio shot may have been 50 on the gray card and between f2.8 and f4 (p. 570).

3 negs

May 10, 2019 The green notebook is full. I am compiling research from a year ago about my 16mm films made on 3378. Lots of notes were made in many notebooks and lots of PDF attempts and versions resulted. Very confusing...

October I last used this film. Today, July 8, 2018, I evaluated three strips of negatives hanging from the ceiling in the darkroom. They were labeled Oct. 10-11, 2018. The Green thinner Book 3 has notes on pages 806 to 808.

Three strips of negative film hang from a paper clip stuck into my ceiling. They were developed Oct. 10-11, 2018. The third one done is best. RO9 was used in STAND developing 3378 to negative. 1:400 dilution, 65 degrees F, 2 hours time, 3x agitation to begin then 1x every 40 minuets. 25 ASA, I think. It depends on how you measure the light. That day was overcast and rainy, light was 640-1 block uncovered on the Sekonic light meter incident dome on the low scale, black. 24 fps in a Bolex H16T. I adjust the light one stop lower as if covering the dome. The closest f stop was f2 maybe 1/3 stop closed towards f2.8. The darker exposures become brown.

The best could be better if they were lower in contrast. Less time developing and colder temperatures may work.

That day, Oct. 11, was overcast, 160-1 on the Sekonic Low Scale. The H16-T camera was used at 24 fps, with the Switar 25mm lens on infinity. 3378 was the film. f2, f2.8, f4 and more were shot, but only f2.8 looked good. Maybe lower towards f2 because of a note. 1/50 I suppose. Developer came out gray, not black as with 1:300, 1 1/2 hr. 68*.

Confirmation is needed.

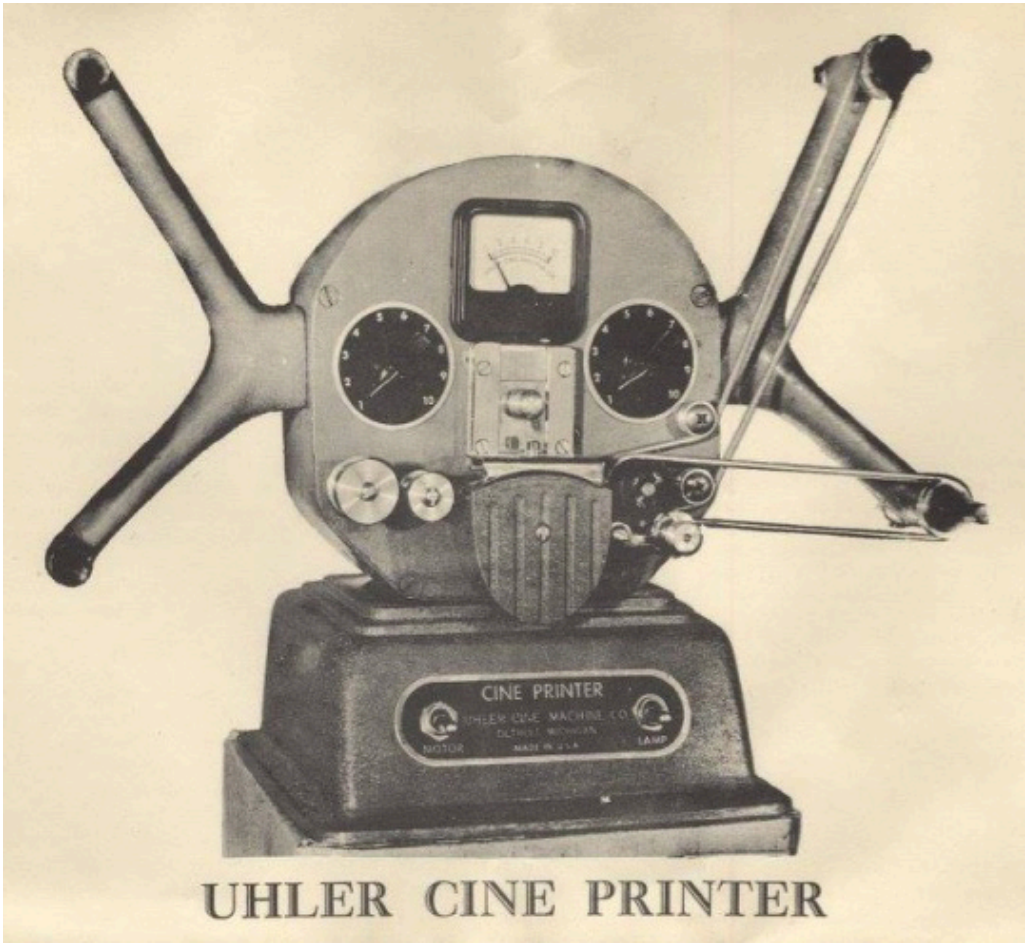
https://www.youtube.com/playlist?list=PLU2eKg3uAYHi5ng70ffR87qymetLLLrZQ

https://www.youtube.com/playlist?list=PLU2eKg3uAYHhWwZY5MUSOMLl2nhtJurwV

CONTACT PRINTS

Contact prints may be made from negatives or internegatives. An internegative IS a contact print. Prints may be positives or negatives. Contact prints may be made from 3378 negatives or 7222 negatives. I have used 3378 to make internegatives of 7277 then print those also on 3378.

p 571 May 12, 2018 After 3378 had been reversed in Test 16 and great skin tones had been achieved, and after the Som Berthiot 25mm Rx lens had been fixed and focus tested, 3378 was developed to see how to make it as a negative. If it could be made into a negative, then it could be printed on from a negative, using my printing machine.



UHLER CINE PRINTER

No other print film was available to me at the time. Sound film would have to do. It had made pretty good images in the focus tests of music and me in the studio so I figured it was well worth trying to print onto also.

Playlist:

https://www.youtube.com/watch?v=5qNQO9yxFr4&list=PLU2eKg3uAYHhWwZY5MUSOMLl2nhtJurwV

The negative test is not included.

Print 2 is the title of the first video. The first print wasn't done correctly. Audio says this is the first print.

All the videos were copied from my external hard drive into a folder on my desktop. Names will be changed both places, in the folder and in the playlists, so I can go through them in the order in which they were made.

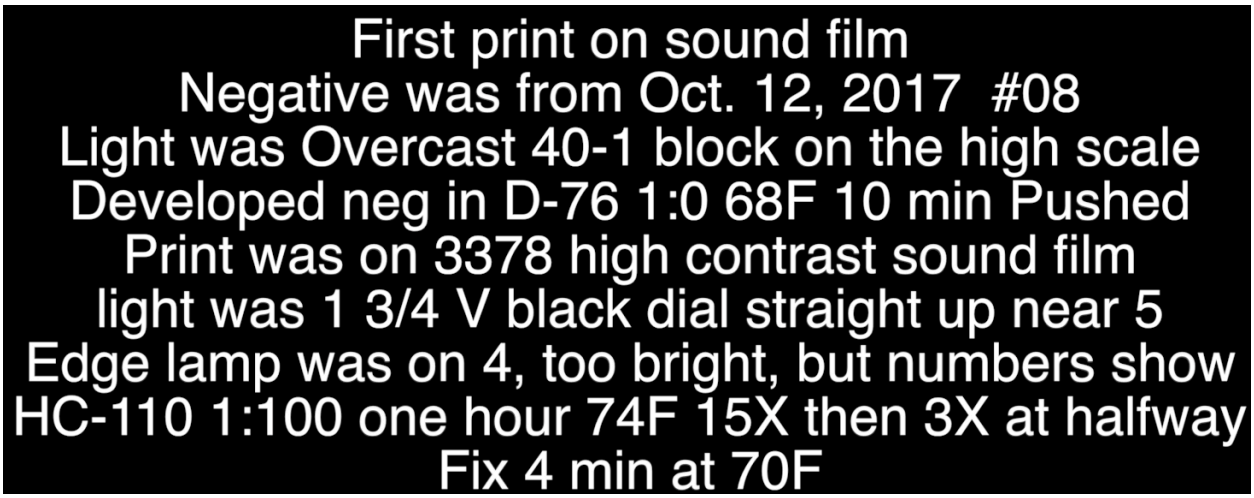
Perhaps the disc could be accessed from this document? Or it could just be loaded into any computer and the files opened for each chapter. The names would have to be accurate though.

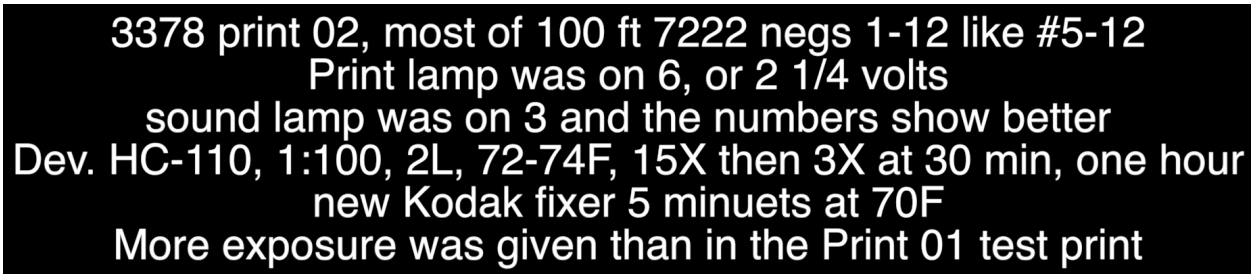
First Print

First print on sound film
Negative was from Oct. 12, 2017 #08
Light was Overcast 40-1 block on the high scale
Developed neg in D-76 1:0 68F 10 min Pushed
Print was on 3378 high contrast sound film
light was 1 3/4 V black dial straight up near 5
Edge lamp was on 4, too bright, but numbers show
HC-110 1:100 one hour 74F 15X then 3X at halfway
Fix 4 min at 70F

Third print

7222 was printed on 3378 HC-110. 1:100. one hour. 74 f 15x 3x. print 3
May 20, 2018



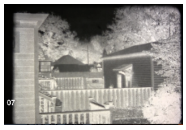


7222 on 3378 Print 03
May 20, 1018
Lamp on 5 or 1 1/2 volts
HC-110 1:100 2L 70F
10X then 3X at half way, one hour

Print 4 on May 21, 2018
7222 contact printed upon 3378
Lamp was on 4
one Volt
Developed in HC-110 after a 3 min. presoak
70 degrees F, 1:100 2L
one hour with 10 spins to start and 1 at the half hour

Print 7
May 25, 2018
7222 printed onto 3378
Printer lamp was 2 Volts, between 5 & 6, straight up
HC-110 1:120 69 F 1 hour 10x then 2x at the half hour

Print 2 was exposed about the same but
development used 1:100

f 2.8	f 4	f 5.6	f 8	f 11	f 16
					

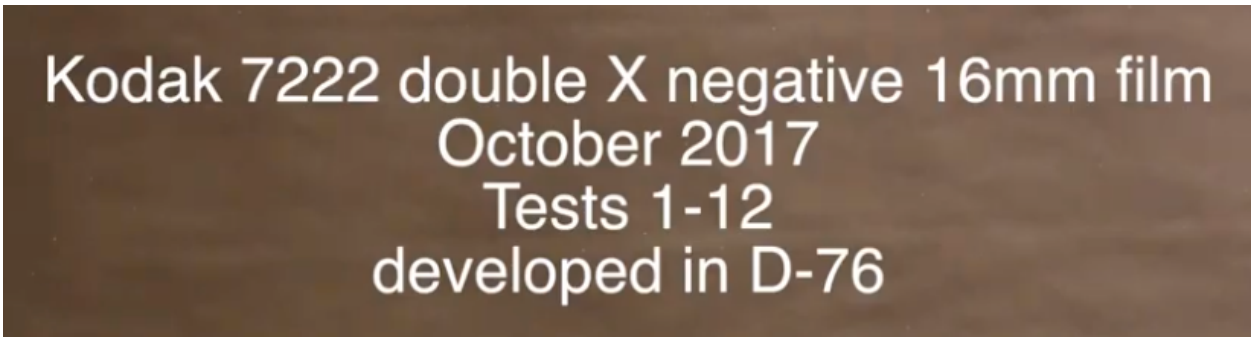
Negative 07. Print 01. Print 02. Print 03.

Top down: f2.8, f4, f5.6, f8, f11, f16 7222 printed onto 3378.
neg: D-76 1:0 68F 7min. stop, fix 5. Page 322
Print 2: page 581 #6 2 1/4 volts Dry HC-110 1hr 1:100 74* 15x, 3x, fix 5 edge 3
Print 3: page 583. #5 1 1/2 volts presoak HC-110 1hr 1:100 70* 10x, 2x, fix 5 edge 3
Print 4: page 586. #4 1 volt presoak HC-110 1hr 1:100 70* 10x, 1x, fix 5 edge 2


07 Slate
07 f 2.8
07 f 4
07 f 5.6
07 f 8
07 f 11
07 f 16
07 p2 slate
07 p2 f2.8
07 p2 f4
07 p2 f5.6
07 p2 f8
07 p2 f11
07 p2 f16
07 p3 slate
07 p3 f2.8
07 p3 f4
07 p3 f5.6
07 p3 f8
07 p3 f11
07 p3 f16
07 p4 slate
07 p4 f2.8
07 p4 f4
07 p4 f5.6
07 p4 f8
07 p4 f11
07 p4 f16

Negative Assembly Print Prep

Page 572 https://youtu.be/KqHEqnMK0As



Print Negative 7222 on 3378 developed in HC-110 Stand to lower contrast. I have a box of negatives already processed. Each negative was detailed in my notes.

1. They were rolled up. I wanted to splice them all together to make printing easier.
2. I figured out how to load the 3378. Did I need to re-roll the film so it is emulsion side down?
3. What lamp setting was used? High I bet because it is slow film.
4. I spliced all the negatives done on 7222 into one reel.
5. It was projected and
6. a video of all of it was made.
7. I wanted to drive to Toronto and buy PF2

Do not give up. Print film has not arrived. Use what you can. Print Negative 7222 on 3378 developed in HC-110 Stand Method to lower contrast. A box of negatives, already processed, is at hand. They were to be all spliced together. How is 3378 loaded into the printer? What lamp setting should be used? The negative was projected later and a video was made of it.

These are all of the negatives projected onto a movie screen. I have contact printed them 5 times including one print video made on 7222. The other 4 were lately printed onto 3378 high contrast film. There are many other print loops from last year that have not been videoed, however 5 of them were. They look very different from these printed on 3378. The older ones were printed on the same film as the negatives.

The job now is to coordinate the negative with the prints. One test negative has different bracketed exposures. Differently printed copies of the same negative have pictures that look best projected occurring at different places along the brackets. A dark negative will look good printed with a bright light. A light negative will look good printed with a dim light. I tried to print as much as I could of the negatives with 3 lights, bright, medium, and dim. Development was basically the same for the prints on 3378. Other prints were on 7222 of the SAMs negatives. Not many were uploaded.

This is the eighth negative.

Spliced 7222 Negatives

Page 573. Splice emulsion side up, sprockets towards me, allows for a soundtrack. Negative has clear edges - so do prints on 7222 - The images may be identified by looking through the shiny base side with the sprocket holes on the left side. Emulsion curls inwards.

I went looking for the negative, then I remembered that I had cut it up to make a film of the best parts. Those negatives remaining were all cut apart and hung up in three collections, light, medium, and dark. I hope to be able to set the light level on the printer according to the density of the negative.

Each of these are to be spliced together and the best light found.

A Print Attempt but Reversed (Try #1)

neg 7222 assembly onto 3378 but reversed by accident

Page 576- Some frames were saved on Page 584

Exposure: The lamp was set to 3 Volts, between 6 & 7, closer to 7. The negative was on a daylight spool. I didn't trust those gray plastic projection reels not to snag the film during printing.

The negative was rewound onto one of the two 400 foot brown metal reels. Black daylight 100 foot spools were used on the print film. I had stretched my arms wide apart, yet only got a tiny tail on the 110 spiral reel.

The ruby window was covered during printing. Nothing could be seen. The print was felt being taken up so I knew when to stop.

Development: Developed according to test #16 on page 564. HC-110 1:100 3ml + water up to 300ml total. 74 degree F water-bath. Dry - No presoak. 15x agitations to begin then 10x at 20 minuets, 10x at 40 min. and 10x at 60 min. then it was dumped out at 75 minuets.

New bleach was used at room temperature, Whoah! That was 74 degrees. Old Clear was the same temperature. Ghost images were very dark. I counted to 40 during re-exposure on each side.

Second developer was HC-110 1:100 3.5ml? 74 degrees 15x one hour 10x at 20 min 10x at 40 min, and at 60 min. it was dumped out. The fixer had to be cooled down to 70 degrees.

Results: The pictures are way too light, even clear white. The film was reversed. Too much light was used was used to expose the print. The gray cards do show as negatives, oops. No negative numbers show. One piece of a negative image shows correctly next to a black end. Edges are black. I dropped it, too. **I trashed it.**

Title, then there is a negative then a long clear written on part. The negative title is dark. My reversed print is better. The first neg looks correct. Use 3V for dark negatives.

Print 01

Page 578 https://youtu.be/KnbVy12t0yo 3378 first Print of 7222

First print on sound film
Negative was from Oct. 12, 2017 #08
Light was Overcast 40-1 block on the high scale
Developed neg in D-76 1:0 68F 10 min Pushed
Print was on 3378 high contrast sound film
light was 1 3/4 V black dial straight up near 5
Edge lamp was on 4, too bright, but numbers show
HC-110 1:100 one hour 74F 15X then 3X at halfway
Fix 4 min at 70F

Kodak 16mm Double X negative was printed onto Kodak High Contrast Sound Recording Film. 7222 negative printed onto 3378 Sound film to make a positive using a Uhler Cine Printer, a contact printer.

f22, 16, 11, 8. Negative # 8. Exposed at about 1 3/4 Volts for the picture, and the edge numbers at about # 4, according to the audio, and that was a little but too much light, 2 1/2 or 3 would be better.

The negative film ran through the printer backwards. The print is steady, it does not bounce.

HC-110 1:100 74 F 15x one hour, then, 3x half way. New Kodak Pro fix 4 min. at 70 degrees. Dry. No water bath.

Some of the print looks good. Those negs would be too dark. This much light fixed them.

A dark thick negative would make light prints. That would be the negative that received the most light or f8 shown left.

The second exposure at f11 looks best here. However, in 3378 Print 02, part 08, the first exposure at f8 looks best.INTERNEGATIVES

40-1 foot candles on the high scale is 120 Asa using 1/40 at f11 shown above

Left below is f16

Light was 40-1 on the high scale of the Sekonic light meter. f22 left image. Overcast. Oct. 12, 2017 in a thick Red notebook on page 327. Push process was tried in the negative processing. Developed in D-76 1:0 68 degrees F using normal agitation. F22 is high contrast and dark enough to project nicely - or print - whatever. It is very very different from previous f22 negatives.

A light thin negative would let more light through to the print and would make a dark negative like this one. F22.

This same negative was printed again to try and get lower contrast. https://youtu.be/hNZbFV_S0dI Print 07.

Page 578. This time, develop a positive print once and do not reverse it. The subject was the title board of 7222 08. “Try #2” I called it.

The negative that was used was double tape spliced into a loop. Print film ran straight. The negative prints tail first, backwards, in order to print edge numbers so they can be seen. I’m thinking that the 2nd developer turned that last film black leader very black indeed. Perhaps less agitation is called for with negative development? er, Print developing. So, try 3x inversions on the half hour. That’s it.

Exposure: The picture lamp was set to -2 Volts or a little below 2. The edge lamp was on 4. I must have bumped it in the dark fumbling around. 5?

Development: HC-110 1:100 3ml of developer was filled up to 300ml with water. It was used dry, no pre-soaking at 74 degrees F. 15x agitations started the development. 3x on the half hour, wash 10x 20x Fix 4 min at 70. Only the base was wiped with paper towel.

Results: Looked great! 7222 08 title board, f8 11 16 22. There are 4 exposures then another title board and part of one exposure. All exposures look great. One edge is black and one edge is white. With the emulsion towards you vertically with the sprocket holes on the left side, that side is black. 8617 shows then 8618. The numbers are gray, overexposed. Use less light on the edge. Not 4 but 3 or less.

I am ready to print all the 7222 spliced negatives at one time. This short test was successful. The print projected correctly the exposed brackets for 200 ASA daylight. I guessed the right lamp setting on the printer, -2, and the right time and temperature and agitation in the developer. 1 3/4 Volts on the white dial is a little more than 5 straight up on the black dial. That was too much for reversal and just right as a positive.

I really like how the print looks now.

This negative was double tape spliced as a loop. The print stock ran straight on reels.

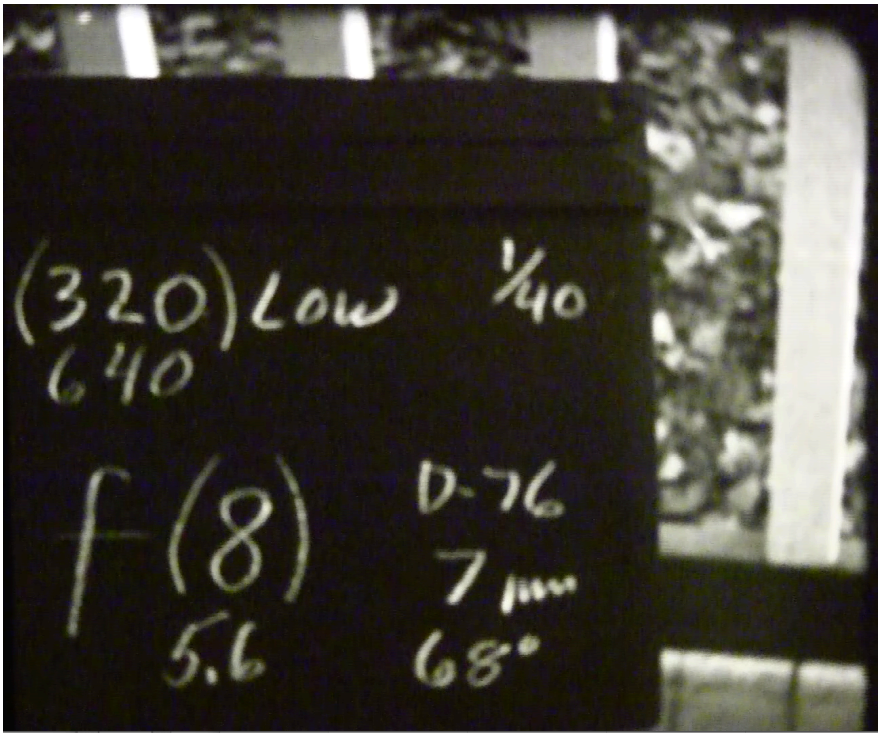
This video was edited again and made progressive instead of interlaced. That is so it may be watched from the computer and not from YouTube. It was loaded to youtube anyway but may also be included on a CD for the book. https://youtu.be/RZOEl1hZEU8

This film is 250 ASA daylight. Using this light to print with, and developing as it was done, I think the correctly exposed bracket is f11, however, closer to f16 is probably more like the way things looked that day, overcast. 260 would be f16, too dark. A different print lamp setting is required or different processing to get 250 exactly.

Print 02

Page 580-1 https://youtu.be/5qNQO9yxFr4 May 20?, 2018

In the video I say this is my first print, but it is the first *long* print of 80 feet or so. Other earlier prints were shorter.



The start position on the negative was not at the beginning. Watch the complete negative projection in order to find this start place between 10/6/17 and 10/5/17

https://youtu.be/KqHEqnMK0As

Some of the slates are wrongly labeled as 7276. Film was 7222 in all cases.

The picture lamp was on 5 or 1 1/2 Volts. The sound edge lamp was on 3. Both were taped down to prevent them from being moved accidentally. The negative was fed in backwards or tail first. Print film is shorter than a full spiral. The beginning was cut.

HC-110 1:100 20ml of developer then water to 2000ml 70 degrees and a 3 min presoak. 10x agitations to start (5x less). One hour total. Half way through at 30 min 2x agitations were given. Fix 5min at 70 degrees.

8 1/2 feet were not printed this time. Spirals were messed up on the outside and a lot of them stuck together. Go easy on agitation, be more gentle.

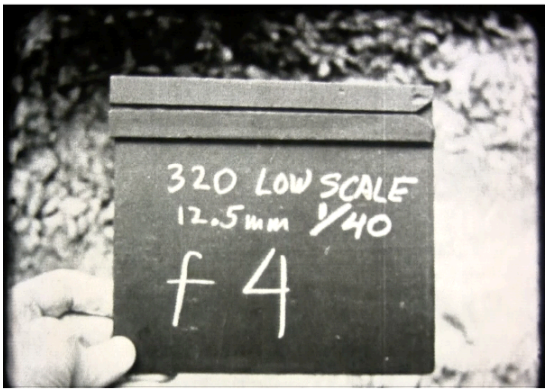
I tried to get less contrast by using cooler temperatures, presoaking, and less agitation.

In 08, f11 is now too dark, whereas in 3378 Print 01 f11 was just right.

3378 print 02, most of 100 ft 7222 negs 1-12 like #5-12
Print lamp was on 6, or 2 1/4 volts
sound lamp was on 3 and the numbers show better
Dev. HC-110, 1:100, 2L, 72-74F, 15X then 3X at 30 min, one hour
new Kodak fixer 5 minuets at 70F
More exposure was given than in the Print 01 test print

Print 03

Page 586 Both Printer Lamps Were Lowered



Picture lamp was on 4 or 1 volt and the Sound lamp was on 2.

https://youtu.be/3jG345A7lkA

Part 08 shows the third exposure at f16 to be the best looking one.

My description on YouTube: Prints are being made from 16mm 7222 negatives 1-12 done October 2017. Too much agitation knocked the film off the spirals or it got messed up loading near the end some other way. I need to do this over again to get the other clips intact. Also, there is too much contrast with this developer.

May 21, 2018 page 586 Print 3. Both printer lamps were lowered. Film picture light was set on 4 or 1 volt. Sound lamp was on 2. I checked and it was still on. The negative was measured and marked where print stock had run out. It was 8 1.2 feet short. That much of the negative was advanced and loaded at that mark. Both the negative and the print stock ran out at the same time. My scheme worked. LIFT in Canada was consistent in loading their spools.

The LOMO Pro was loaded almost all the way out to the edge. I had practiced once with a dummy load and no glitch occurred.

Presoaked in 70 degrees 3 minuets.

HC-110 1:100 2 L 70 degrees

No bouncing - only spinning agitations

10 spins to begin. One spin halfway.

Fixer had to be cooled to 70 degrees, then 5 minuets in it.

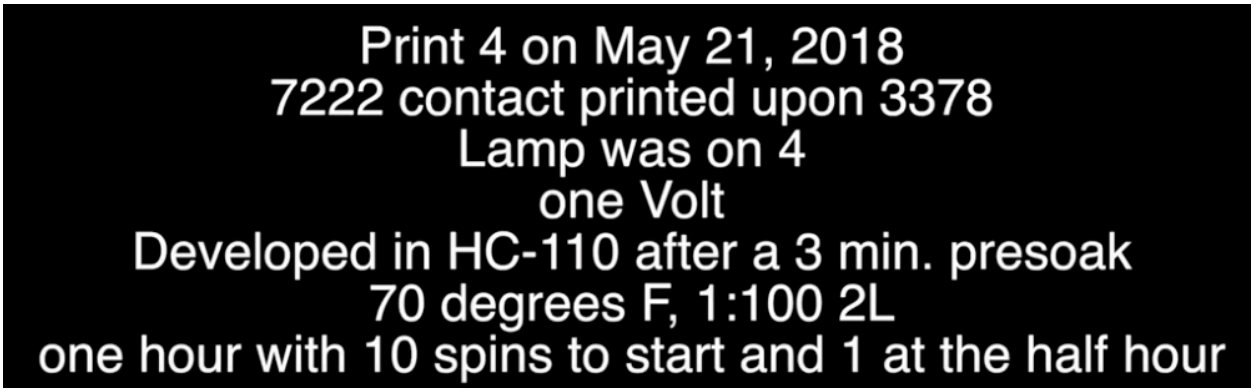
The sprocket edge is too light now. #2 is too light. #3 is dark. The negative has too much leader is on it. There are long clear areas like at 8698. Many image sections are way too thin and too light. They are dark negatives. Most of the print looks good. One clip is dark at 8469.

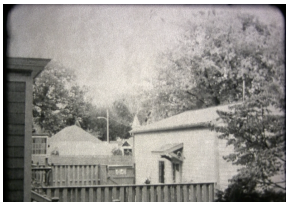
Print 04

Page 590 May 24, 2018 https://youtu.be/8WSvuU8PbF0

This is a contact print of 16mm double X negative on sound film. During development, less temperature, less agitation, and pre-soaking were used to try to lower contrast. Less light on the printer made very dark images just right.

In 08 the forth exposure at f22 looks best. Previous Prints move down to f8, print by print, f stop by f stop, one by one, as the light level of the printer is changed. F22 allowed very little light to hit the film developed to negative, so that negative is thin, light, and needs a very low light to print a good looking image. There are probably other effects associated with thick or thin, black almost opaque negatives, and white almost totally transparent negatives, but I am only looking for a basic exposure combination that yields good images.



f 8	f 11	f 16	f 22
			

Pretty cool, huh?

A lower contrast of prints on 3378 was desired. HC-110 was used at 1:100 in 68 degrees one hour with minimal agitation but still had harsh contrast.

Try 1:200. Instead of that, try reducing the developer gradually. 3ml in 300ml had been used. Try 2.5 or 2ml instead.

6 feet of film was advanced in camera but, with a closed lens and one more wind. It was cut off and the camera was reloaded. The removed film was put on a daylight spool in the dark on the printer with a tape on leader.

The negative was tail first, sprockets away. The picture light was on 4 or 1 Volt, the soundtrack edge lamp was increased back up to 3 again.

Developer was less, 2.5 ml was used and filled up to 300 ml with water. HC-110, 1:120. It is more dilute to lower contrast in the print.

Exposed film was presoaked 3 minuets in 68 degree water. Development had 10 agitations to begin, one agitation half way at 30 minuets, one hour.

Results: Most of the print is way too light. The negative looks normal, plenty dark. The edge looks good. More light is needed at 1:120 one hour or a longer developing, except for the f22 negative!

Comments: The negative was Neg. 12. The tail is the interior of the house, showing forwards. Pictures of James at the end should have been printed first if the tail was printed first as I said. But I didn't know if all of the negative had been printed or not. He was at the end of the dining room table shot. And yes he made the print.

I still like only using very little developer, but an hour is a drag.

Research on Stand developing film in HC-110 yielded a lot of results. Even 1:500 is used. 1-150 and 1:125 are common. 1:200 two hours long was used. I'm not going there, but reports say detail in darks are good and tone is in highlights. No blocking of lights was reported. That looks promising. We'll see.

In this, print 04, the Constable Oak was made to look great in the tilt down by the garage. The autumn orange leaves are white. Print 2 looks best in the next shot.

Assembly of Negatives

Page 594, 600, 601, 615 June 1, 2018

Selections were made from prints developed so far to make into one film.

Parts of 7222 negatives were printed on 3378 3 with different lights. Other short parts were also printed and developed differently. All the best images have been assembled onto one timeline in Final Cut Pro X. This assembly was done in the computer, iMAC + FCPX, from different film prints, that were projected and commented upon, during the video recording, Print 01, Print 02, Print 03, and Print 04.

I used Finder to view the file, and captured stills with Command Shift 4. The Table of images fits 15 on a page. All the prints were included that looked good. Only one of each shot were included here and some were eliminated, like the leaves on the ground, and other frame ups in panning sequences.

Rough Cut

Rough Cut screen captures from The Final Cut Pro Timeline.









Print 05

Page 592. https://youtu.be/W1N2YeQkpOA
LC-1 test. The first bracket of seven is the best. LC-1 Low Contrast tests of Negative 12, Kitchen and Dining room scenes. The thing to look for is the Table top is too light.
The video I have on the computer is interlaced and plays badly on the Mac. Making them Progressive is required.

Not too shabby.

Page 601. Record of LC-1 test prints as projected.

4 Volts, #7 to #8, 7 minuets, #5 edge, 2.0.8 LC-1

7222 negatives and positives from test 08

f 8	f 8
	

The bush on the lower right is full of detail. The siding is very dark and closed. The print is too light.

f 11	f 11
	

This print looks best of the four. The negative shows some lines in the siding.

f 16	f 16
	

The print is a little dark at this printing lamp setting. A better photograph of the frame would reveal more detail in the LR bush, based on how the next photo looks.

f 22	f 22
	

Look at how dark the sky is in the neg and how light the siding is. There is still detail in that bush on the lower right corner. Way too much light was used on the print for this negative.

Top down: f2.8, f4, f5.6, f8, f11, f16 7222 printed onto 3378.
neg: D-76 1:0 68F 7min. stop, fix 5. Page 322
Print 2: page 581 #6 2 1/4 volts Dry HC-110 1hr 1:100 74° 15x, 3x, fix 5 edge 3
Print 3: page 583. #5 1 1/2 volts prescak HC-110 1hr 1:100 70° 10x, 2x, fix 5 edge 3
Print 4: page 586. #4 1 volt prescak HC-110 1hr 1:100 70° 10x, 1x, fix 5 edge 2

Enlarged Scan

How large can I scan one frame? 4800 dpi. Big enough. 2126 x 1456 I reduced this image file size since it was as big as the iMAC.

This was scanned through the plastic sleeve. The picture is of me seen in a mirror. The image on the right is out of focus. Exposure was f4. PF2 is the print stock. The previous page is where the image came from.

The next image was scanned out of the plastic sleeve on the glass. It was scanned at 2400 dpi. Resolution was not reduced. Sharper.

1075 x 742 Development needs to be darker or longer or greater contrast, the blacks are not black. See the Pages file 7222 8/28 where I already reported on this.

Bolex as Printer

February 26, 2019

The PF-2 I have is double perf. The negative had to be inserted tail first, the highest edge number was first, between the sprocket holes, on the camera floor. The PF-2 was put emulsion side next the the negative emulsion. The negative was on the outside or the right side, with the camera on my lap, with the lenses facing forwards. A deep red safelight was used. Exposure was in a H-16 T camera, 12 fps, 16 fps, 18 fps, 24 fps, 36 fps. with the lens removed, and the handle touching an 8x10 fluorescent white light box. Two or three single frames with the gate covered were made between speed changes. The camera was not moved back. Development was in D-97 at 58 degrees F a total of 2 1/2 minuets. Fixer was at 68 F eventually in 8 minuets. About 4 min was at 68. There are good pictures everywhere. Every exposure made pictures, not too dark, not too light. The negative was a normal density one.

https://youtu.be/HCeD_3glV_o

https://youtu.be/ZepuY8COsMI

https://youtu.be/lWlB3McAiPs

Single Frame Slates & Brackets 1

July 25, 2019

3378, H16T, 12fps, SF, Tripod, CR, HC110, 1:100, 1 hr, 78, 6x 2x halfway

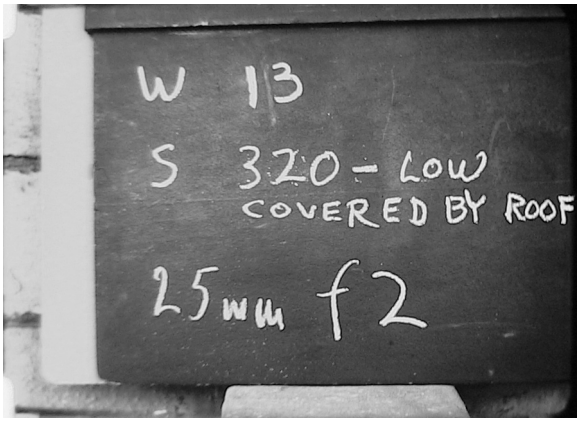
	A gray-card light reading was taken at the knoll post. 16fps SF is 1/35 not 1/30. 12fps is 1/30 SF. f2.8-1 at 12 ISO is 25 foot candles which is what my notes say. Bleach and clear and fix were all done 2 minuets each, because tests revealed to me that film cleared in 30 seconds each. The film was a lot shorter than I thought, but it was developed anyway just to get a proof of concept sample of this single frame exposure test method.
	After the slate was completed, I jumped in place and took a selfie. Same exposure. The skin tones look really nice and I'd like to be able to duplicate this look. **12 ISO.** It is a 1/3 stop difference from the next test.

The next sequence begins with a slate and is followed by some landscapes. However, the camera messed up and images were blurred. It is hard to figure out what is what. Later, after the film was removed, I got the Vaseline and wiped some on the trigger shaft using a Q-Tip. It worked. The second test does not have any smears on it. I also started to use a cable release. The first one didn't work and a different one did.

Single Frame Slates & Brackets 2

July 26, 2019

3378, H16T, 12fps, SF, Tripod, CR, HC110, 1:100, 1 hr, 78, 6x2x

	**Slate Brackets**. 5.5 ASA The video camera, even taking snap shots, changes exposures but you can see the differences. I manually changed this one. There is a gray card behind the slate here. This piece of film is much lighter than the other two exposures and I did not include it at first, but the bracketed sequence is valuable.
	10 ASA Whole stops were used in all bracketing. **W** is the Weston reflected light meter. **S** is the Sekonic incident light meter **Low** is the low scale without a lumaguard **-** The minus sign means that the needle was on the left or low edge of the number block on the light meter.
	20 ASA

The sun was shining through the trees early in the morning but it was shaded in this corner of the porch enough to measure the gray card.

Single Frame Slates & Brackets 3

July 30, 2019

3378, H16T, 12fps, SF, 1/30, Tripod, CR, HC110, 1:100, 1 1/4 hr, 73, 15x 10x @ 20 minuet intervals

DEVELOPERS

D-19

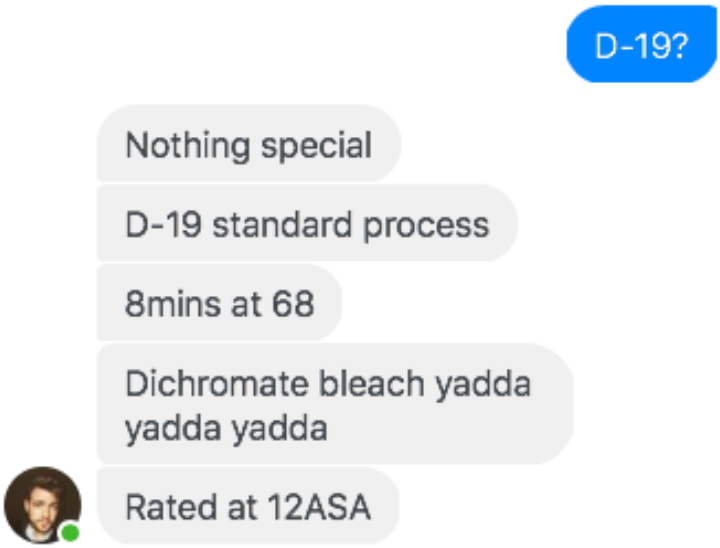
Owen uses D-19 in reversal for lots of rolls.

“Shot and processed my first roll of 3378 this weekend. Shot at ASA 25 and ASA 10, in D-19 for 8.5 mins in both cases. For some reason the 25ASA had a slight 'sepia' tinge to it--but the 10ASA didn't. Either way, I was extremely impressed with the results. Far less contrasty than I was expecting. High-res scans to come soon.

It is not a one-shot. Use it as first developer (about 8-9 mins) then return to bottle. I then use it as the second developer for 5 mins then return to bottle. 1 Gallon lasts me almost 7-12 months processing between 10-15 rolls of various types and lengths. I use it for all of my own B/W reversal movie and still films. Can't recommend it enough.

No dilution. D19 substitute from Photographer's Forum. lasts me about a year. Yes--it was reversed with excellent results.

Note: I don’t think that high contrast developer that is undiluted can process reversed high contrast sound film correctly for skin tones at least. No samples were published.



LC-1 Formula

dilution, and temperature will vary based on your desired result.

For lith printing, mix 1 part A & B Lith Developer working solution with 14 parts water. For lith processing of film, mix A & B in equal proportions.

SOEMARKO'S LC-1 & LC-1B LOW-CONTRAST DEVELOPER FORMULAS FOR CONTINUOUS TONE ORTHO LITH FILM

To be perfectly clear, it's not a simple task to dial in specific density and adjust for the contrast when making an enlarged duplicate inter-positive on a high-contrast film. The traditional controls of exposure, development time, and developer dilution fall shorter still when the requirement is placed on an inherently high-contrast product such as an ortho lith film. Traditionally, an artist who wanted a continuous tone lith film would attempt to trick the film into providing a longer tonal scale by processing it in a standard Dektol paper developer in the 1:4 to 1:10 dilution range. Others would make esoteric mixtures of combined paper and film developers in an effort to control the tonal scale and still be able to use this inexpensive film, which was a staple in the graphic arts and printing industry and a favorite amongst art students everywhere because it was cheap, big, and easy to get and had funky high-contrast characteristics. Also, the problems with it were somewhat predictable. They included the following:

- High-contrast (density) and loss of highlight or shadow separation (low density)
- Inconsistent densities between test strips and final positive and negative film
- An uneven or mottled appearance throughout the tonal scale
- The need to constantly refresh the developer to maintain consistency

Dave Soemarko's self-assigned task was to develop a working technique in which he could fully control the inter-positive in making an enlarged duplicate negative. The beauty of Soemarko's formula is that it allows the artist to get that low-contrast inter-positive needed for the final negative step in an orderly and consistent manner. His LC-1 inter-positive technique also allows you to use lith film and develop it so that it has a very long tonal scale from toe to shoulder.

The following is going to document the LC-1 and LC-1B techniques using some out-of-production ortho lith films. I asked Dave Soemarko if he felt that it was going to be an issue applying his formulas to processing the few ortho films that remained on the market and he replied, *"Nothing has changed on my LC-1 and LC-1B developer formula. I do not know for sure specific similarities or differences between Arista Ortho Litho 2.0 and Ilford or Kodak. They all work similarly, but Arista used to have two versions of their litho film, one is higher in contrast and more expensive. The other one was slightly lower in contrast and cheaper. Since we want to use it for continuous tone instead of high-contrast screening work, the lower contrast is actually better. I am not sure about Litho 2.0, but if there are still two versions, the lower-contrast one should be preferred. One can probably just use LC-1B unless one wants to really play with the contrast. In that case one would use LC-1."*

Note: Again, although I am referencing Arista APH and APHS film, both of which are out of production, you will be able to approximate the same results using the Arista Ortho Lith 2.0.

Being able to use lith film is a bonus because it comes in a wide array of sheet sizes and rolls, and it is also affordable, even on a student's budget. The film in the first test is Arista Premium Halftone Supreme (APHS). In a more recent test, Soemarko worked with Arista Premium Halftone (APH), which is less expensive than APHS but yields similar (some think better) results. The APH test is described at the conclusion of this section.

Dave goes into a lot of detail in Judy Seigel's *Post-Factory Photography Journal* describing his entire investigation and how he arrived at his formulas. If you're interested in seeing how his mind works, I refer to that specific issue, #2 (available in well-stocked

arts-centric bookshops like the Strand in New York City). Following is a description of the salient points of the process. LC-1 is made from two stock solutions and water, and it is manipulated to suit the particular stage of the process you're dealing with, interpositive or negative.

The Standard LC-1 Formula

Stock A

750 ml	distilled water (125°F)
3.0 g	metol
60 g	sodium sulphite
3.0 g	hydroquinone

Distilled cold water to make 1 liter

Stock B

10 g	sodium bisulphite

Distilled cold water to make 1 liter

Once the separate stock solutions have been made they are mixed together in equal or unequal amounts and diluted with additional water to make a 10-part formula. An example of this would be a 2:1:7 formula or 2 parts Stock A, 1 part Stock B, and 7 parts water.

In a developer with a stronger alkalinity such as Dektol, which contains sodium carbonate, the processing speed is faster. The contrast of values is greater, and this combination results in accelerated exhaustion of the developer, which, in turn, leads to uneven development.

With Soemarko's LC-1 formula and a mix of the preceding 2:1:7 solution, Dave made multiple tests with the same exposure and development and found that each negative was nearly identical to the other! There was no mottling, or uneven values, proving that the development was well controlled. He presoaked his film for 3 minutes and processed for 5–7 minutes and achieved a gradation of 21 steps. The inter-positive was low in contrast, indicating that he could place all of the tonal separation in the original negative into the inter-positive and go for the higher-contrast positive in the negative stage by extending his development time. The low contrast of the inter-positive is a great help in avoiding compressed values when making the negative.

For a second example with the same negative, Dave changed his formula to 2:2:6, a proportional mix that indicated an increase in the sodium bisulphite portion of the formula. Because sodium bisulphite is an acid, the contrast is reduced. In his test, the inter-positive development was slower and the toe-to-shoulder curve was nearly linear. If you find unevenness in your developed film, simply add more of the Stock A to your 10-part formula. Density will increase with this change. If you wish to maintain the same low contrast, you will need to add more of Stock B.

The Rule: *The more acid, or bisulphite, in the formula, the less active the developer, and less contrast in the film. The reverse of this rule is also true.*

An example of this modification to the 10-part formula is indicated in the following way. You have a formula of 2:2:6, giving you the contrast you desire but showing unevenness in the film. You would want to compensate for this, so you would change the formula to 4:4:2. This new proportion eliminates the unevenness but may give you too much contrast for the inter-positive. An additional modification to a 4:5:1 formula, with a little extra bisulphite, makes a less active developer and reduces the contrast, providing the correct results. For almost any inter-positive on ortho lith film, a formula of 2:1:7 or 2:2:6 is going to give you good results with a 5-minute development time. Many users find that a formula dilution of 2:3:5 will give a linear response for a longer exposure range, which can be very useful for in-camera use of lith film.

The principle is the same for making both the inter-positive and the final negative. In the inter-positive, a low-density range is sought as a way of adjusting the overall density levels of the negative and having both the top and bottom end of the scale usable.

In the final inter-positive negative stage, the tonal range is attached to the process, and you will likely want to use a formula indicating a stronger developer or a LC-1 formula of 2:0:8 with a 6-minute development.

The two-stock LC-1 formula is particularly useful if you are testing a different high-contrast lith film. Once

The Standard LC-1 Formula

Stock A

750 ml	distilled water (125°F)
3.0 g	metol
60 g	sodium sulphite
3.0 g	hydroquinone

Distilled cold water to make 1 liter

Stock B

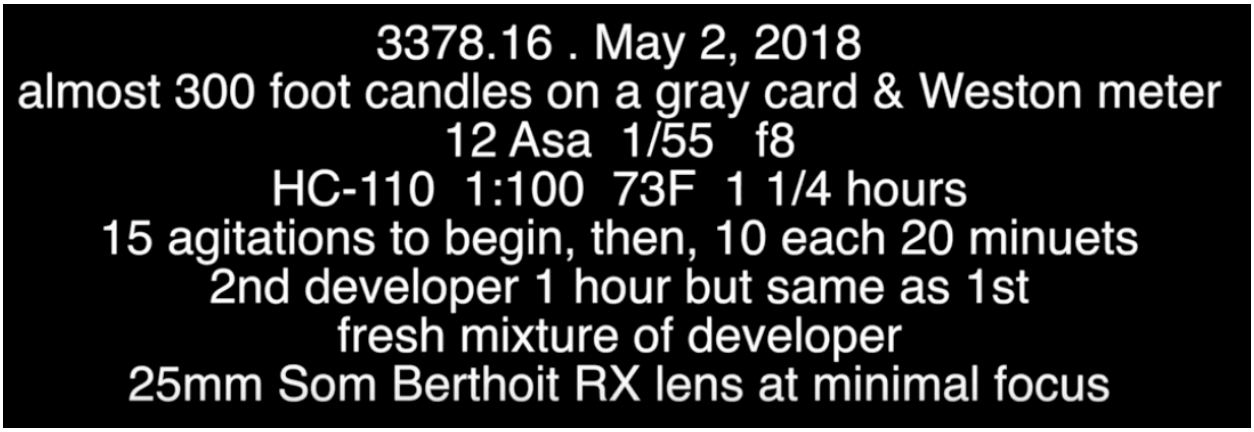
10 g	sodium bisulphite

Distilled cold water to make 1 liter

Once the separate stock solutions have been made they are mixed together in equal or unequal amounts and diluted with additional water to make a 10-part formula. An example of this would be a 2:1:7 formula or 2 parts Stock A, 1 part Stock B, and 7 parts water.

Test 16

https://youtu.be/jSqZ-7J7OAE How to develop it. Test #16

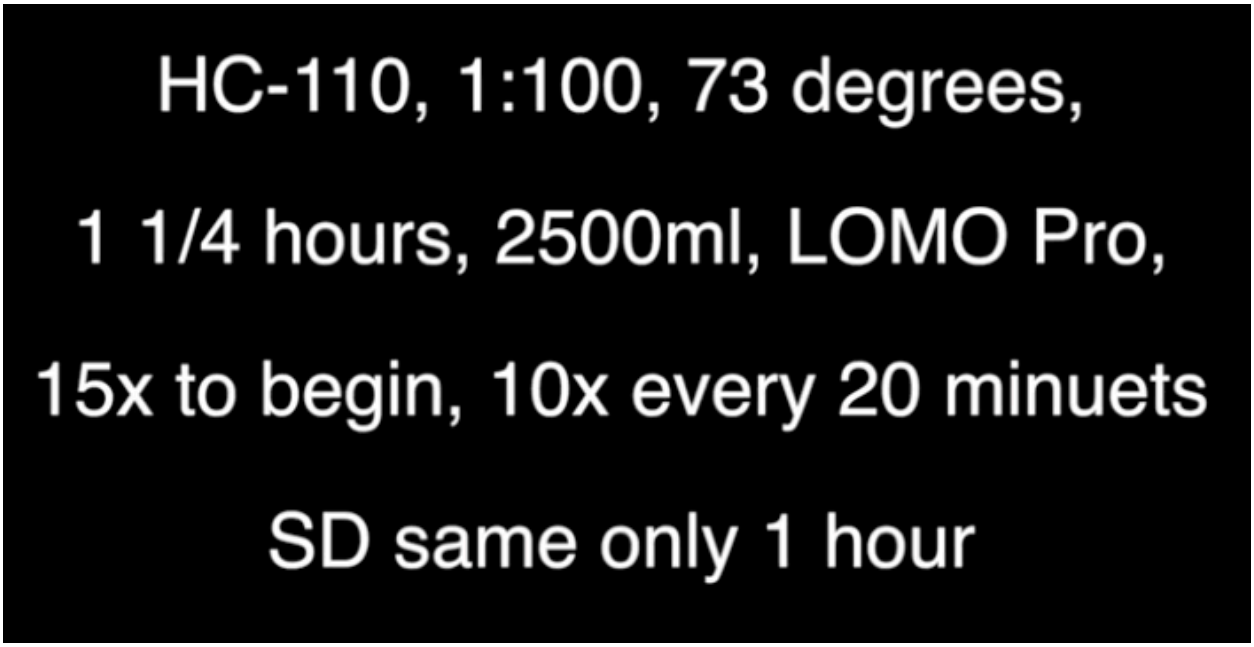


H16-RX camera

Test 17

https://youtu.be/11hYJiIVGcw **3378 July 24**, 100 feet.

3378 was shot in a Bolex H-16 T camera using all 3 lenses and a Minolta spot meter, then developed in a LOMO Pro 100 foot tank. Not all of the film fit. Excess was developed in a Jobo tank on a 110 reel then spliced back to the head of the film. HC-110 was used to develop by the STAND method: 1:100, 1 1/4 hours, 73 degrees F, 20x agitations to begin & 10x at 20 minuet intervals. SD 1 hour. This film costs $12 per 100+ feet at Mononoaware, but they would not sell me any more, well, they sold it but then did not ship it to me. It costs 25% less if bought direct from Kodak in 6x1200 ft bulk at student rates. I only used 25ml of developer each time but could have used half maybe if the FD were reused as the SD. I always mix a new batch just to be safe. 2.5 Liter of developer was used. Extra is needed in Stand developing. 2L covers the spirals but more prevents Bromide drag and uneven developing.



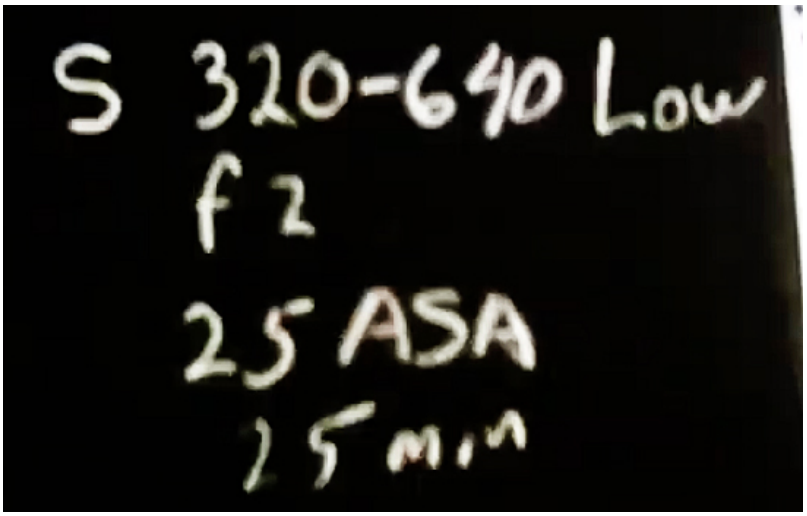
Page 1280 in a Yellow notebook.

3378 #17

3378 16mm black and white sound film was reversed using HC-110 by the Stand method. Nice smooth skin resulted with great contrast. No spots. This is the only method I have found that makes smooth skin without any spots, details in the dark, great contrast, super thick blacks...and was done in the shade. I am getting close to being able to control the exposure. This sample was made using a JOBO tank with two 110 reels in it, so there are some artifacts here and there. Focus could be better, I hand held the camera to speed things up. 16 fps 1/40 Bolex H-16T

https://youtu.be/O6hg6SNkUmw

This was developed like 3378 #16 in HC-110



3378 July 30 SF

https://youtu.be/7jRgOmgm1iw

3378 black and white sound film was reversed using HC-110 in STAND developing. I was going for good skin tones. A color chart was also photographed to find out the latitude of the film. Single frames were used. An H16T Bolex was used at 12fps single frames 1/30.

As you can see there are 4 single frames of selfies all at the same exposure first. The color chart has 5 frames at f2.8, then 3 at halfway, and 3 more at f4. Me at f2.8 was repeated 4 times, then 1/3 stop less exposure was used 3 times, 2/3 stop less was also 3 frames repeated, and the last f4 exposure has 3 frames.

The last sequence of head shots was 4, 3, 3, 3 frames, starting at f2.8 and ending at f4 in 1/3 stop steps. 4 frames at f2.8, 3 frames at f2.8-1/3 stop...

There are a lot of posts on Home Movie Film Lab about 3378 around this time period.

The last time I used 3378 and posted about it on MY facebook page was August 23, when I used

This camera was loaded with 50 feet of 3378 and used with the Weston pointing down, developed in Eco Pro 1:100, in the fixed Lomo UPB 1-A tank all after testing the developer on 3 feet first. Dark on the left?!

Then, a Cine Kodak Model BB, brown body, and the Weston light meter used 3378. Loop was lost and film was ruined on Edgewood day.

August 8, 2018

Sound sync tests slightly solarized

This was a 24fps bracketed test made in 1/3 stops. This distance is perfect for self filming sound sync tests. I can operate the cable release and my head is completely in picture and not distorted. Outside, the camera isn't very loud. I wonder what this would look like if I had not taken off the lid after second processing and during fixing?

How to photograph slates were just earlier and before that was test #17.

July 11, Tests on raw, exposed to room light, 3378, developed in D-97 1:0 in 1 min to black and cleared in just over that much. So, I adjusted developing time to 2 min and fixing to 2 min. Both at 68 degrees F. The exposure lamp on the printer was lowered a tiny bit. Now the spikes are neat and clean, sharp and jagged. Sound track spikes.

Album 3378 ASA tests in RO9

https://www.facebook.com/photo.php?fbid=1391316811009104&set=ms.c.eJxNy8kNACEMQ9GORjYOWfpvbASIiIMvT~%3B5UUfSYBIrExwuxFt5gB~_JCciewBphsmLJh7MSrwVeCeuA85gaPEExwZf4w1R7Y.bps.a.1391316724342446&type=3&theater

July 10 published but noted: 10-11-18, 3378, RO9, 1:400, 2 Hours, 65 degrees F.

Oct. 11, 2018, Green Notebook, #3, Page 808, Bolex H-16 T, 25mm Switar on infinity focus, 24 fps, 1/60, 3378 film, Light was measured using a Sekonic incident meter as 640-1 block on the low scale, rainy, exposures were f2, f2.8, f4, and f5.6. Development was in RO9, diluted 1:400, at 65 degrees F, 2 hours, agitated 3 times to begin, then, 1 time every 40 minuets. Negatives were inverted and adjusted in Photoshop Elements.

I tried to find out the asa by bracketing. This shot was f4. Light was 640-1 block uncovered on the low incident scale of a Sekonic light meter on an overcast day. 1/60 f4 50 ASA

f4 is 100 ASA if the sekonic light meter is adjusted by covering it or by lowering by one stop the reading when uncovered.

I am really more interested in reversal of this film and not in digital manipulation of negative images, but this looks really good and it is easy to do. There is more earlier and flash tests, too.

7222 contact printed on 3378

https://www.youtube.com/playlist?list=PLU2eKg3uAYHhWwZY5MUSOMLl2nhtJurwV&fbclid=IwAR13kzc-fdXlysY4YNvZqWUSjgWHYEkR9Zt0lhKOMS2mui7tA4yWiNRyf90

A Uhler Cine Printer was used at home to print from 7222 onto 3378. This is easier to do than reversal since you don't have to bleach or clear the film.

This is what I really want to do more of.